

## REMARKS/ARGUMENTS

By this paper, Applicant replies to the Office Action of September 1, 2009 and respectfully requests reconsideration of the application.

Claims 1, 3-10, 12-18, 20-26, 28-33, 39, 40 are now pending, a total of 31 claims. Claims 1 and 18 are independent.

### I. Claim 1 and § 101

Paragraph 7 of the Action suggests a § 101 issue, but fails to address the claim language.

#### A. The Action does not discuss the claim language

First, the claim does not recited “the steps of receiving and executing” alone. Rather, the claim recites steps “in an electronic trading system.” The body of the claim recites an “electronic trading system” repeatedly:

1. A method for operating an electronic trading system for the exchange of financial instruments, the method comprising the steps of:

**in an electronic trading system** designed to receive and store orders to buy and to sell financial instruments as submitted by traders, and substantially as orders are received, to execute trades between matching buy and sell orders, stored buy and sell orders having order matching priority orderings relative to each other reflecting at least one attribute of the order in addition to or instead of price, the order matching priority ordering used by the **electronic trading system** to determine priority among orders for matching for execution:

receiving a dynamic price improvement order, being an order to buy or sell an identified financial instrument traded on the **electronic trading system**, whose order matching priority for execution against contraorders is maintained by the **electronic trading system** at least in part relative to earlier-submitted orders on the same side of the market by adjusting a price associated with the dynamic price improvement order;

receiving orders contra to the dynamic price improvement order, and matching the contra orders to the stored orders on the same side of the market as the dynamic price improvement order substantially as the contra orders are received, the dynamic price improvement order being matched to the contra orders with the order matching priority relative to other orders as maintained by the **electronic trading system**, and

executing transactions substantially as orders and contra orders are matched.

The Action fails to consider the “electronic trading system” language that is positively recited repeatedly in the body of the claim. (Everything after the words “comprising the steps of:” is *not* preamble.) After considerable research of the decisions of the Board of Patent Appeals,

Applicant is unaware of a decision that has affirmed a § 101 issue when a “computer,” or “system” where the “system” is disclosed to include hardware (as in Fig. 7 and paragraphs [0067] and [0068] of this application), is recited in the body of the claim.

The claim recites a machine, and is therefore directed to statutory subject matter.

**B. “Programming” creates a new machine that is statutory subject matter under § 101**

In order to be “designed to,” computers have to include specific electronic circuitry, software, or some similar component or modification. The Federal Circuit has repeatedly held that programming “creates a new machine,”<sup>1</sup> and that such a new machine is a patentable “machine” that meets § 101. The Board’s recent decisions agree.<sup>2</sup> The language “an electronic trading system designed to...” is sufficient to invoke the “machine” prong of § 101.

**II. § 103 and Peterffy ’804 and Konia ’151**

The claims are discussed in relation to Peterffy ’804 and Konia ’151 in unnumbered paragraphs at pages 7-11.

**A. Claim 18**

Claim 18 recites as follows:

1. A method for operating an electronic trading system for the exchange of financial instruments, the method comprising the steps of:

in an electronic trading system designed to receive and store orders to buy and to sell financial instruments as submitted by traders, and substantially as orders are received, to execute trades between matching buy and sell orders, stored buy and sell orders having order matching priority orderings relative to each other reflecting at least one attribute of the order in addition to or instead of price, the order matching priority ordering used by the electronic trading system to determine priority among orders for matching for execution:

receiving a dynamic price improvement order, being an order to buy or sell an identified financial instrument traded on the electronic trading system, whose **order matching priority for execution against contraorders is maintained by the electronic trading system at least in part relative to earlier-submitted orders on the**

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<sup>1</sup> *In re Alappat*, 33 F.3d 1526, 1545, 31 USPQ2d 1545, 1558 (Fed. Cir. 1994) (*en banc*); *In re Freeman*, 573 F.2d 1237, 1247 n. 11, 197 USPQ 464, 472 n. 11 (CCPA 1978); *In re Noll*, 545 F.2d 141, 148, 191 USPQ 721, 726 (CCPA 1976); *In re Prater*, 415 F.2d 1393, 1403 n. 29, 162 USPQ 541, 549-50 n. 29 (CCPA 1969).

<sup>2</sup> *Ex parte Moyer*, <http://des.uspto.gov/Foia/RetrievePdf?system=BPAI&fNm=fd2009002154-01-20-2010-1> at page 8, 2010 WL 227951 at \*4 (BPAI Jan. 20, 2010).

**same side of the market by adjusting a price associated with the dynamic price improvement order;**

receiving orders contra to the dynamic price improvement order, and matching the contra orders to the stored orders on the same side of the market as the dynamic price improvement order substantially as the contra orders are received, the dynamic price improvement order being matched to the contra orders with the order matching priority relative to other orders as maintained by the electronic trading system, and

executing transactions substantially as orders and contra orders are matched.

First, in Applicants' paper of June 2009, Applicant traversed any correspondence between "order priority" of the claim and the "priority" of Konia '151. The September 2009 Action notes that Konia '151 shows "orders" and "priority," but does not attempt to answer the precise issue traversed, that Konia '151 does not show an "**order priority**" as that term is understood by those in the art, and having the properties recited in the claim. The claims are now amended (without changing the scope of the claim) to uniformly use the term "order matching priority" to make clear that the claims rely on a specific term of art with the meaning understood by those in the art, not the vague relationship between unrelated concepts detached from the claim language discussed in the Action. The Action does not address either the precise language of the claims or the precise issues traversed, so it is difficult for Applicant to move the application forward, except to request that the Examiner focus precisely on the claim language, and precisely on the issues traversed.

Second, an affidavit of Oleg Mestechkin notes that the terms "order priority" and "order matching priority" are terms of art, and they do not correspond to Konia '151 in the way that the Office Action proposes. An affidavit is "substantial evidence" that cannot be overcome by any amount of examiner explanation.

Third, the Action is not logically consistent. The Action, at page 7, states that Peterffy shows "order matching priority for execution against contraorders is maintained by the electronic trading system at least in part relative to earlier-submitted orders on the same side of the market" but does not show "adjusting." But the claim is clear that the "priority maintaining" is the **causal result of** the "price adjusting" If "price adjusting" is absent, then "priority maintaining" **as a result of** "adjusting" or "by adjusting" cannot possibly be shown in Peterffy.

For three reasons, the Action is insufficient to show obviousness of claim 18.

If any future rejection is raised, the Examiner must come forward with substantial evidence that overweighs Mr. Mestechkin's affidavit to a preponderance of evidence, and must directly answer all material traversed in the three bullet points at pages 12-13 of Applicant's paper of June 8, 2009.

### **B. Claim 1**

At page 11, the Office Action suggests that some claim language "are not positive limitations but only require the elements to be able to perform the function." The Action suggests that the language might be only an "intended use." The Action is not correct. The claim language is "an electronic trading system designed to..." accomplish certain results. Computers cannot act based on the mere "intent" of their owners; computers require specific programming in order to perform their relevant functions. The case law discussed in § I.B was directed to § 101 issues, but is applicable to § 103 as well: "programming" or designing a computer to perform a function creates a new machine and is "is not a mere field-of-use label having no significance."<sup>3</sup> This language is therefore "structural" and must be given full weight.

### **III. Designation of Paragraphs in the Office Action**

The Examiner's attention is drawn to MPEP § 707.07(k):

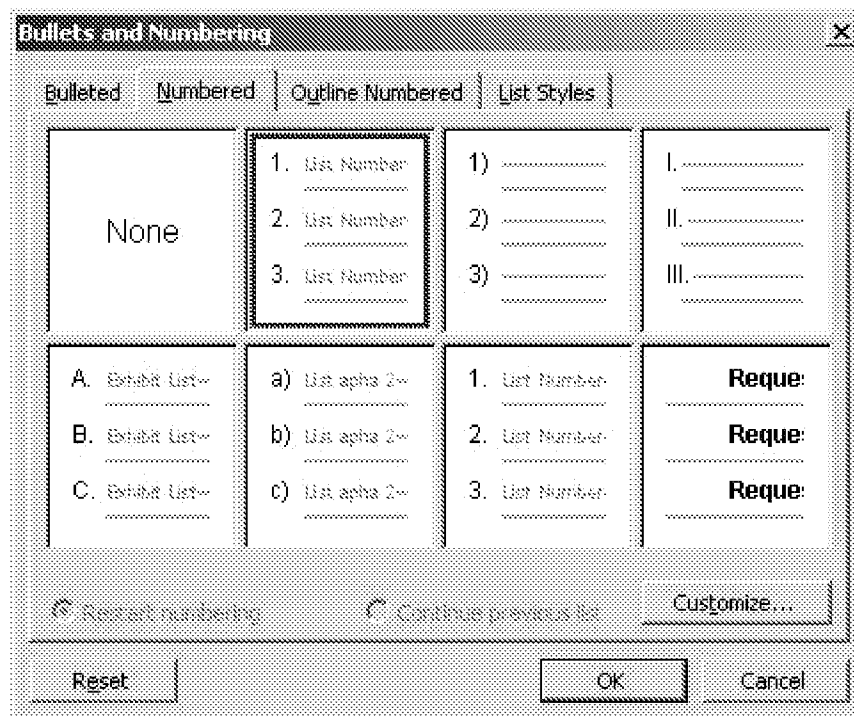
#### **707.07(k) Numbering Paragraphs**

It is good practice to number the paragraphs of the Office action consecutively. This facilitates their identification in the future prosecution of the application.

The examiner's attention is also drawn to the menu in Microsoft Word, Format > Bullets and Numbering, which gets to this dialog box:

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<sup>3</sup> *In re Alappat*, 33 F.3d 1526, 1544, 31 USPQ2d 1545, 1558 (Fed. Cir. 1994) (*en banc*)



The Examiner will observe that this Reply paper is remarkably less clear than it would have been had there been paragraph numbers in the Office Action to which to refer.

#### IV. Conclusion

Applicant hereby authorizes the USPTO to communicate with any authorized representative concerning this application by electronic mail.

A Petition for Extension of Time extends the shortened statutory period through March 1, 2010. Accordingly, this reply is timely. In the event that further extension of time is required, Applicant petitions for that extension of time required to make this reply timely.

In view of these remarks, Applicant respectfully submits that the claims are in condition for allowance. Applicant requests that the application be passed to issue in due course. The Examiner is urged to telephone Applicant's undersigned counsel at the number noted below if it will advance the prosecution of this application, or with any suggestion to resolve any condition that would impede allowance. For the entire pendency of this application, the Commissioner is

hereby authorized to charge any additional required fees (including all extension of time fees), or credit any overpayment, to Deposit Account No. 50-3938, Order No. 03-1083.

Respectfully submitted,

BGC PARTNERS, INC.

Dated: March 1, 2010

By: /David E. Boundy/  
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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Serial No.: 10/826,779 Confirmation No.: 1294  
Applicant: Michael Sweeting, , et al.  
Title: DYNAMIC PRICE IMPROVEMENT  
Filed: April 16, 2004  
Art Unit: 3691  
Examiner: Gregory Johnson  
  
Atty. Docket: 03-1083  
Customer No. 63710

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**AFFIDAVIT OF OLEG MESTECHKIN**

I, Oleg Mestechkin, declare as follows.

1. I am currently employed as a patent agent by a corporate affiliate of the assignee of this application.

2. My professional experience includes:

- 8 years working as a technical support engineer on the eSpeed system, an electronic trading system with prioritized order matching and execution

3. In preparing this declaration, I have reviewed the following portions of the prosecution history for application serial no. 10/826,779, and other materials:

- Office Action of Sept. 1, 2009
- U.S. Patent No. 7,225,151 to Konia: the Abstract; col. 5, lines 50-67; col. 11, lines 19-45; and col. 12, lines 2-5.

4. I also rely on my personal knowledge in the art, and the plain meaning given terms in the art.

5. The term “order priority” is a well-established term of art with a meaning well-understood in the art.

6. The term “order matching priority” is also heard from time to time, and would be understood by one of ordinary skill to be synonymous with “order priority.”

7. The “priority” discussed in the portions of Konia that I reviewed is unrelated to “order priority” or “order matching priority.” Because the Office Action of Sept. 1, 2009 does not state an interpretation of the term “order matching priority” or state an interpretation of the Konia patent, I cannot identify the precise error in the analysis in the Action. All that is clear to me is that the attempted analogy between the “priority” in Konia and “order priority” or “order matching priority” as those terms are understood in the art is not correct.

8. I express no opinion on any issue not expressly set forth above.

9. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

Dated: March 1, 2010

By: / Oleg A. Mestechkin /  
Oleg A. Mestechkin